Brucellosis

Agent: Brucella species (bacteria)

<u>Mode of Transmission</u>: Most commonly through ingestion of unpasteurized milk or milk products from infected animals, but also may be transmitted by contamination of skin wounds with infected animal tissue or body fluids and by inhalation of the organism.

<u>Signs/Symptoms</u>: Intermittent or irregular fever, headache, chills, sweating, and muscle pain. Some signs and symptoms may persist for longer periods of time, while others may never resolve.

<u>Prevention</u>: Unpasteurized dairy products, especially milk, cheese, or ice cream, should not be consumed. Barrier precautions, such as wearing rubber gloves, should be used when handling animal tissue. Laboratory workers should take proper infection control precautions when handling samples known to contain or suspected of containing *Brucella*.

Other Important Information: Considered an occupational disease of those working with infected animals, especially farm workers, veterinarians, and abattoir workers. Hunters of certain game animals such as elk, moose and feral swine may also be at increased risk of exposure. *Brucella* is listed by the CDC as a potential bioterrorism agent because the organism may be relatively easily disseminated, may cause moderate injury or death, and may need enhanced surveillance for detection.

Two cases of brucellosis were reported in Virginia in 2015. One confirmed case occurred in an adult male from the northern region and one probable case was reported in an adult female from the northwest region. Consumption of unpasteurized milk and calving assistance while traveling in Central America were considered likely risk factors for illness for the confirmed case. A definitive exposure could not be determined for the probable case. The 5-year average in number of cases of brucellosis in Virginia is less than one case per year.